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THE AMERICAN REVOLUTION in Military Affairs

By WILLIAM A. OWENS

We use the term *revolution in military affairs* (RMA) a lot today. It comes up in briefings at the Pentagon. Journalists and academics write about it. We discuss it within the Armed Forces and with military leaders from other nations. That is as it should be, for RMAs can be disturbing. They demand considerable debate and dialogue if we are to master them. So what is the current RMA? Where does it stand today? And where will it go?

As the essays in this issue of *JFQ* suggest, the revolution is alive, healthy, growing, and stirring the debates, insights, and passions which accompany rapid and significant innovation, especially in the United States. Indeed, the world will increasingly refer to the “American” RMA, for while military thought outside this country

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reflects some aspects of what is underway, it is here that the discussion is deepest and the technologies that drive the revolution are most robust. And it is here that the integration of those technologies with each other and with military organization and doctrine has already begun.

Like every other revolution, the American RMA involves big changes—changes that occur or can be recognized suddenly and that spread across institutions, doctrine, and the way we think about the use of force. What makes revolutions disturbing, of course, is not the scope, speed, and extent of innovation as much as what must be given up to consummate them.

The problem with deep, fast, and rampant innovation is not getting people to accept the new but to surrender the old. Most will flirt with the future, but few want to embrace it at the expense of a comfortable present.

In some respects, this is an apt commentary on the state of the current revolution. We now have a pretty good idea that the American RMA stems from the way several particular technologies will interact. Most senior military and civilian leaders agree that

the specific technologies are those that allow us to gather, process, and fuse information on a large geographical area in real time, all the time; that allow us to transfer that information—call it knowledge—to our forces with accuracy and speed; and that provide us the capacity to use force with speed, accuracy, precision, and great effect over long distances. Moreover, there is agreement on their interaction. We have decided to build what some of us call the *system of systems*; namely, interactions that will give us dominant battlespace knowledge and the ability to take full military advantage of it.

The evidence of this collective agreement is in the defense budget, the recommendations of the Chairman’s Program Assessment, and in what the services state in white papers, staff studies, and battle laboratories. Funds allocated for the programs that will give us the system of systems are growing at rates considerably higher than the overall DOD budget. The Chairman’s Program Assessment recommended this, an idea generated largely by intense, in-depth discussion among senior military leaders and work in the last two years of the Joint Requirements Oversight Council (JROC). And whether it is found in *Army XXI, Forward . . . From the Sea*, the Sea Dragon initiative, or *Global Presence*, the basic argument is similar, reflecting the commitment to radically improved situational awareness, agile communications, and precision weaponry.

So the decisionmakers inside the Pentagon agree on the path of the future. Deciding to take this revolution-ary course was not easy, for in a period

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when our budget will not rise appreciably, reallocating resources in favor of the system of systems means starving programmatic pets in order to nourish the new arrivals. Yet that is our decision.

There is less agreement on how fast to go down this path—on how much to accelerate the system of systems—and what should be given up in

RMA suggests a range of force structure issues that have yet to be resolved

the process. But the commitment on direction is clear and, I believe, irrevocable. As a result, the United States will be the first nation to emerge in the post-revolutionary era equipped with proficiencies that will perhaps change the character of warfare as it has been known for centuries.

While we are now moving down the revolutionary path and have accepted the prospect of large scale innovation—which occurs relatively quickly and spreads across institutions, doctrine, and thought—not everything is settled. We currently lack a firm consensus on two dimensions of this American revolution. The first is what it means, more specifically, for military organization and doctrine. The second is what it means for U.S. foreign policy and our role in the world.

Most of us inside the Pentagon believe our institutions will change, perhaps dramatically. But we have come to this deductively, not from empirical, detailed assessments and experiments that must be done. Still, the kind of information-empowered, dominantly knowledgeable forces in our common vision call for flattened, less hierarchical organizations. The concept of being able to *see* a large battlefield with great fidelity raises intriguing possibilities. For instance, if we know where enemy forces are and what they are doing—in detail as well as real time—and engage them with highly accurate, reliable, and effective longer range weapons, why would we require the kind and size of close air support forces that exist today? Indeed, does not that capability

suggest that the need to build units in reserve on the tactical and operational levels will become an anachronism? And surely there is a subtle relationship between the kind and the size of logistics structures needed and the precise, real time logistics data we will have on tactical requirements and material flows. In short, the American RMA suggests a range of force structure issues that have yet to be resolved. We sense collectively that they loom just over the horizon. But the status of this di-

mension of the revolution remains unclear, with little firm agreement as to what is to be done.

Part of this ambiguity reflects the profound challenge which the American RMA posits to the Clausewitzian idea of war, the notion of the “fog and friction” of conflict. Clausewitz probably articulated as well as any other theorist what experienced warriors sense to be true—that the clash of military forces is so complicated as to seem chaotic, so ambiguous that even the simplest plans and actions are difficult, so uncertain as to form an impenetrable fog that obscures predictability. First stated at the outset of the 19th century, these ideas have underpinned military thinking in the United States and elsewhere throughout this century. Today we find them in doctrine (“fog and friction” as inherent to operations), structure (units in reserve as a hedge against the “inevitable” fog and friction of war), and the design of command and control systems (redundancy assuring the transmission of information in the face of unexpected delays).

In fairness, the architects of the American RMA have never claimed to be able to completely dissipate the fog of war nor fully eliminate the friction of conflict. However they have argued that the revolution can introduce such a disparity in the extent to which fog and friction apply to each side in war as to give one unprecedented dominance. Notwithstanding that important nuance, this revolution challenges a vital assumption about our thinking on the use of force—and the attitudes and institutions resting on that assumption. This is ultimately what makes it a true revolution.

It is no wonder, then, that we have not reached a consensus on the doctrinal and structural implications of the revolution. Yet, as in deciding to embark on the revolution, we have committed ourselves to working them out. This effort, too, is probably irrevocable, and our willingness to think seriously about such things will increase our revolutionary lead.

In dealing with these questions, we must also address the equally compelling issue of what this RMA means in terms of foreign policy. Even if it lives up to its military promise of unequaled potency, that will not necessarily make achieving our goals easier, particularly in building a stable, just, and free world. The disparity in military power which RMA offers the United States presents a dilemma: how can we use this power to deter and compel—that is, to convince other nations that they cannot prevail against us—without frightening them into attempting to counter our power? We have not agreed on an answer. We have hardly examined the question.

Where does this American RMA stand as we near the next millennium? It is in full swing. We are embarked on a revolutionary path, the system of systems is emerging, and importantly we have accepted the promise and the risk of innovation. We have not, however, reached agreement on how fast to traverse this course nor exactly what the journey will entail. While underway, the revolution is not yet consummated. It is time for discussion, debate, and insights—appropriate for the contributions in this JFQ Forum. **JFQ**